

AMENDMENT TO THE CLAIMS

Please rewrite the claims as follows:

Claims 1-16 (Canceled)

17. (Previously Presented) An Image sensing device comprising;

an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions;

a memory arranged to store plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels;

a selector arranged to select linear correction data from the plural sets of linear correction data stored in the memory in accordance with a position of a pixel of interest among the matrix of pixels; and

a calculator arranged to correct an image sensed by the image sensing element by using selected linear correction data.

18. (Previously Presented) The device according to claim 17, wherein the image sensing element includes a color filter, and linear correction data to be selected by the selector are different from each other depending on whether a pixel of interest is in an odd line or in an even line.

19. (Previously Presented) The device according to claim 17, wherein the selector is further arranged to select linear correction data from the plural sets of linear correction data in accordance with one at focal distance, field angle, and diaphragm of a photographing optical system or a combination thereof.

20. (Previously Presented) An image processing apparatus for processing an image sensed by an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions, the apparatus comprising:

a memory arranged to store plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels;

a selector arranged to select linear correction data from the plural sets of linear correcting data stored in the memory in accordance with a position of a pixel of interest among the matrix of pixels; and

a calculator arranged to correct an image sensed by the image sensing element by using selected linear correction data.

21. (Previously Presented) An image processing method for processing an image sensed by an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions, the method comprising:

storing in a memory plural sets of horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural

sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels; and

correcting an image sensed by the image sensing element by using linear correction data selected from the plural sets of linear correction data stored in the memory.

22. (Previously Presented) A memory medium storing an image processing program for processing an image sensed by an image sensing element having a two-dimensional matrix of pixels arranged in horizontal and vertical directions, the program comprising:

storing in a memory plural sets horizontal linear correction data commonly used for correcting at least two of the matrix of pixels and/or plural sets of vertical linear correction data commonly used for correcting at least two of the matrix of pixels; and

correcting an image sensed by the image sensing element by using linear correction data selected from the plural sets of linear correction data stored in the memory.